

REMARKS

Status of claims:

Claims 1-10 remain for examination.

Prior Art Rejection:

Claim 107 stand rejected under 35 U.S.C. § 103 as unpatentable over Yonemitsu in view of Matsushima.

The Examiner repeated the rejection set forth in the prior office action. At the hear of the examiner's rejection is the contention that selecting only one of two fields that form a frame is disclosed in Yonemitsu at Fig. 29 in column 20, lines 3-8. The examiner contents that this disclosure of Yonemitsu corresponds to the selection of only one of two fields that form the frame – that is, selection of the odd field or the even field.

The Examiner's rejection is respectfully traversed.

The frame/field encoding mode switching circuit 52 shown in Yonemitsu Fig. 9(A) selects a mode of decoding from either the frame encoding mode or the field prediction mode. Thus, the data is decoded by either a field construction or a frame construction. Figs. 26-29 of Yonemitsu are utilized to show in the motion compensation process. Fig. 26 and 27, for example, are directed to the motion compensation process which utilizes a frame prediction mode. Fig. 29 teaches motion compensation utilizing a field encoding mode. The referenced part of Yonemitsu in column 9, lines 3-8 reads as follows:

FIG. 29 shows a motion compensation operation embodying the present invention in the field encoding mode. As shown in FIG. 29, pixel data in an odd field is determined by interpolation using another pixel data in the odd field, and pixel data in an even field is determined by interpolation using another pixel data in the even field.

It may be seen by this description that the interpolation method for the odd field utilizes pixel data of other odd fields and that the interpolation method for even fields utilizes data of other even fields. However, this statement just determines how one performs the

interpolation process as part of a general field prediction method. Yonemitsu is simply stating that the odd fields and the even fields are independently processed in the interpolation process. In the prior descriptions relating to Figs. 27 and 28, for example, odd and even field interpolation processing were intermixed. However, the interpolation for the field prediction as taught in Yonemitsu is not in fact the subject matter of applicant's claims. According to applicant's recited invention, only one, but not both, of the odd and even fields is decoded as part of the method for displaying frames of a dynamic image using single field data from an interlaced encoded image data. Thus, in accordance with applicant's invention, one, but not both, of two fields is selected and a frame image is displayed with high quality by decoding the data of only the one field. Yonemitsu simply does not disclose such limitations. There is a big difference between selecting only one, but not both, of two fields (odd or even – but not both) that form the frame and decoding same for displaying the image data (applicant's invention) and independently performing interpolation processing of odd and even fields in a field encoding mode as part of a motion compensation operation (Yonemitsu teaching, column 29, lines 3-8).

It is submitted that the Examiner has extrapolated far too much information from column 29, lines 3-8 of Yonemitsu. The Examiner is invited to read this section of Yonemitsu in connection with the descriptions of the previous figures, such as Figs. 27 and 28 so that the context of Fig. 29 may be understood as part of a motion compensation operation when Yonemitsu is using in the field encoding mode. Applicant can find no teaching in the cited portion of Yonemitsu, nor, indeed, in Yonemitsu as a whole, for disclosing applicant's recited invention. which selects only one of the two fields for displaying the frame image.

In order to better differentiate applicant's invention from Yonemitsu, applicant has explicitly amended that claims to include the above argued distinction by reciting, in claim 1, for example;

to half the size of the DCT coefficients and each frame,
selecting only one, but not both, of two fields that form the
frame, each selected field consisting of selected field blocks.

Further, applicant has retained the distinction discussed in the prior reply in connection with the recitation of adding the zero values to the DCT coefficients of each selected field block in each selected field as high frequency components, a limitation not disclosed in Yonemitsu. The zero values are added to the DCT coefficients of each block in the selected field as high frequency components, and therefore this compensation differs from the compensation step in the Yonemitsu reference in which the compensation is performed for each for each of the odd and even frames in element 92. In column 19, lines 1 to 5, Yonemitsu discloses a selecting circuit 92 which selects 4 x 4 DCT coefficient groups including the DC and low frequency AC components of the 8 x 8 DCT coefficient block provided by the DCT circuit 91 and provides the selected DCT coefficient to an IDCT coefficient 93, and therefore the selecting circuit 92 simply selects the 4 x 4 DCT coefficient groups by masking some data. As a result, the Yonemitsu reference performs the compensation step using the 4 x 4 DCT coefficient groups and, therefore, the compensation step in Yonemitsu differs from the compensation step in the present invention which recovers an image having a data size of one frame while adding zero values to high frequency components in a frame block (or doubling the size of the DCT coefficients).

The Matsushima reference does not relate to the filed of interlaced motion picture processing to which the present application relates. The Matsushima reference simply discloses a process to remove DTC coefficients in high frequency components for reducing image data and adding zero values to high frequency components for expanding the image data, and therefore a person having ordinary skill in the art would not think it obvious to combine the Matsushima reference with the Yonemitsu reference.

Conclusion:

In view of the above discussion, it is submitted that central claim limitations found in applicant's independent claims are not disclosed in the prior art, and thus, the Patent and Trademark Office has not made out a *prima facie* case of obviousness under the provisions of 35 U.S.C. 103. Applicant's dependent claims are deemed to be patentable at least by virtue of their dependency from the independent claims from which they depend.

The application is now believed to be in condition for allowance and an early indication of same is earnestly solicited.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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